

IN THE CLAIMS

The current claims for this application are listed below:

1. (Previously Amended) A process comprising:
 - forming a splitting layer in a semiconductor donor substrate;
 - depositing a bulk heat dissipation handle substrate onto the semiconductor donor substrate, the bulk heat dissipation handle substrate having a thermal conductivity greater than that of said semiconductor donor substrate; and
 - splitting said semiconductor donor substrate along said splitting layer after depositing said bulk heat dissipation handle substrate onto said semiconductor donor substrate.
2. (Previously Amended) The process of claim 1 wherein said bulk heat dissipation handle substrate is silicon carbide.
3. (Previously Amended) The process of claim 1 wherein said bulk heat dissipation handle substrate is a material that removes heat from the semiconductor donor substrate.
4. (Cancelled)
5. (Previously Amended) The process of claim 1 wherein forming said splitting layer comprises implanting said semiconductor donor substrate with a rare gas to form a rare gas implant layer.
6. (Original) The process of claim 5 wherein said rare gas is hydrogen.
7. (Cancelled)

8. (Cancelled)

9. (Previously Amended) The process of claim 1 wherein said depositing of said bulk heat dissipation handle substrate comprises chemical vapor deposition.

10. (Previously Amended) The process of claim 1 further comprising forming a transition layer on said bulk heat dissipation handle substrate prior to said depositing of said bulk heat dissipation handle substrate.

11. (Original) The process of claim 10 wherein said transition layer is silicon nitride.

12. (Original) The process of claim 10 wherein said transition layer is polysilicon.

13. (Cancelled)

14. (Cancelled)

15. (Previously Amended) A process comprising:

providing a silicon donor wafer;

implanting said silicon donor wafer with hydrogen to form a hydrogen implant layer within said silicon donor wafer;

depositing a silicon carbide handle layer on said silicon donor wafer by chemical vapor deposition after implanting said silicon donor wafer with said hydrogen;

splitting said silicon donor wafer along said implant layer to form a silicon layer after depositing said silicon carbide handle layer;

polishing said silicon layer; and

polishing said silicon carbide handle layer.

16. (Previously Amended) The process of claim 15 further comprising depositing said silicon carbide handle layer to a thickness in the approximate range of 0.5mm - 1.0mm.

17. (Previously Amended) The process of claim 15 further comprising polishing said silicon carbide handle layer to a thickness in the approximate range of 750-800 μ m.

18-30. Cancelled.